

DEPARTMENT OF THE ARMY

PROGRAM EXECUTIVE OFFICE ASSEMBLED CHEMICAL WEAPONS ALTERNATIVES 5183 BLACKHAWK ROAD ABERDEEN PROVING GROUND, MARYLAND 21610-5424

March 23, 2017

Colorado Chemical Demilitarization Citizens' Advisory Commission 1602 Clemson Drive Colorado Springs, Colorado 80909

Dear Members of the Commission:

I wish to express my sincere appreciation to all members of the Colorado Chemical Demilitarization Citizens' Advisory Commission (CAC) for your steadfast support in working with the Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) and the other federal, state and local partners involved in preparing the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) for destruction operations. The dialogue with our stakeholders begun by ACWA many years ago continues to be a foundational principle that we continue to this day. I spent some time reading the Commission's letter dated February 22, 2017, and reviewing the transcript of the Commission's verbal comments from the February 22nd meeting. I am fully aware the Record of Environmental Consideration for the shipping terminal has reignited a longstanding concern of the community that we treat hydrolysate onsite as opposed to shipping to an off-site Treatment, Storage and Disposal Facility. The letter you sent clearly reiterates your position on this sensitive issue.

ACWA's commitment to on-site treatment has not wavered. Our plan is to construct shipping facilities that can be used for contingency purposes to prevent interruptions to munitions processing. Circumstances are such that we are now facing destruction limits because of a lack of hydrolysate storage space occasioned by the two unexpected challenges of last November 2016 - the hydrolysate leak from one 30-day storage tank and the failed containment liner for the Brine Concentrator Feed Tanks. As we have reported to you, the 30-day storage tank issue was resolved and that problem no longer poses a risk to the project. The modifications to the Brine Concentrator Feed Tank liner system are well underway and we have again invested significant resources to build a temporary enclosure around those tanks and to implement a liner solution that we expect will be acceptable to the Colorado Department of Public Health and the Environment when completed.

We are now confident of an April 2017 restart of the Biotreatment Area (BTA). However, it will take time to seed the bio-reactors and bring them up to a sustained level of operation using hydrolysate as the feed. There remains some risk associated with using hydrolysate as opposed to surrogate; therefore, the capability to ship hydrolysate as a contingency remains a project necessity. Again, our stated

intent is to ship only if needed and only enough to give our biotreatment system time to get acclimated and become fully functional without impacting plant processing.

From the beginning, PCAPP's plant design included the on-site treatment of the hydrolysate. In those early years, operating under Congressional oversight, we examined and re-examined the costs and efficiencies of shipping these wastes offsite, discussing the issue back and forth until a decision was made to move forward and process on-site. From that point on, ACWA pursued a process of biotreatment followed by a sophisticated water recovery system designed to support the primary mission of destroying the chemical agent stockpile stored at the Pueblo Chemical Depot. Our commitment to treating hydrolysate on-site was further demonstrated when surrogate testing was conducted to help us identify potential operational problems with the BTA and the Brine Reduction System (BRS). We called this our risk reduction project because it would allow us to identify and mitigate issues prior to the start of actual hydrolysate treatment. This was a substantial investment of resources that ultimately, paid dividends in that we learned how to seed the bioreactors, control supplemental nutrients, and the importance of micro-nutrients. We clearly demonstrated the ability of organisms to destroy thiodialycol and identified the need to modify our equipment to better monitor the process. We also learned much from operation of the BRS that is valuable to future operations.

The very nature of a pilot plant brings with it uncertainties in its operation. We have consistently shared with the CAC the challenges faced since we started operations in September 2016. We have also shared the victories over many of those issues that brings us to the fact we have now destroyed over 19,000 projectiles to date. In fact, had PCAPP not experienced the two significant problems last November, we would have started processing hydrolysate through the BTA on November 28, 2016.

What we face today is a combination of technical problems that were not a part of our contingency plans. The liner problem with the Brine Concentrator Feed Tank containment prevents us from processing hydrolysate thereby forcing us to accumulate the wastewater and hydrolysate from our pilot testing activities. Out of necessity, we have had to judiciously plan and execute our testing to conserve precious 30-day tank storage space. In fact, we have slowed processing to preserve our storage space while we complete repairs on the liner system. Our objective is to continue data collection for pilot testing, keep our crews and equipment operating, and continue destruction of agent. Our preference is to avoid even the short-term shipment of a limited amount of hydrolysate, but due to the current status of our tank capacities and the uncertainties associated with the startup of the BTA processes, the temporary shipment option must remain available to us.

Again, I appreciate your comments and support to the PCAPP project.

Sincerely,

Conrad F. Whyne Program Executive Officer